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## NOTICE OF ALLOWANCE AND FEE(S) DUE

128 7590 01/21/2009 HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245

MORRISTOWN NI 07962-2245

EXAMINER

MUL CHRISTINE T

ART UNIT PAPER NUMBER

DATE MAILED: 01/21/2009

APPELCATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONTRIMATION NO.

10748-398 12/30/2003 Barrett E. Cole H0004257 (1100.1225101) 7564

TILE OF INVENTION. PARTICLE DETECTOR USING FLUORESCENTS

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 0421/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. In equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off ions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a							
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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MORRISTOWN	, NJ 07962-2245								(Depositor's nar	ae)
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APPLICATION NO.	APPLICATION NO. FILING DATE			FIRST NAMED INVENT	NTOR ATT			RNEY DOCKET NO.	CONFIRMATION NO.	
10/748,398	12/30/2003		Barrett E. Cole			H0004257 (1100.1225101)			7564	_
TITLE OF INVENTION:					_					
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DU	Е	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO		\$1510	\$300	_	\$0		\$1810	04/21/2009	
EXAM	INER		ART UNIT	CLASS-SUBCLASS						
MUI, CHR	ISTINE T		1797	436-172000						
"Fee Address" indi PTO/SB/47; Rev 03-0: Number is required.  3. ASSIGNEE NAME AT	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach	nge of "Indicated. Use	Correspondence ation form e of a Customer	data will appear on the T a substitute for filing	ngle or a attor be p type e pa an a	3 registered patent ely, firm (having as a gent) and the name neys or agents. If a rinted.	memb s of up to nam	er a 2 p to e is 3	ocument has been filed	_
Please check the appropri	ate assignee category or	catego			۵	Individual 🚨 Co	rporati	on or other private gro	oup entity Government	ent
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies			ed)	4b. Payment of Fec(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby suthorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoint Account Number (enclose an extra copy of this form).						
	SMALL ENTITY state	ıs. See	37 CFR 1.27.	b. Applicant is no I						_
NOTE: The Issue Fee and interest as shown by the r	Publication Fee (if req ecords of the United Sta	uired) v tes Pat	will not be accepted ent and Trademark	d from anyone other that Office.	an th	e applicant; a regi	stered a	ittorney or agent; or th	ie assignee or other party	ın
Authorized Signature						Date				
Typed or printed name				Registration No.						
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	FR 1.3 U.S.C. USPT rden, sl O NOT	11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR	on is required to obtain on 1.14. This collection is depending upon the interpretation of the COMPLETED FORMS	or re esti idivi ficer TO	tain a benefit by the mated to take 12 n dual case. Any co ; U.S. Patent and THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Dep D TO: Commissioner	I by the USPTO to proce g gathering, preparing, a ne you require to compl artment of Commerce, P for Patents, P.O. Box 14	ss) and ete .O.

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



## UNITED STATES PATENT AND TRADEMARK OFFICE

## NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,398	12/30/2003	Barrett E. Cole	H0004257 (1100.1225101)	7564
128	7590 01/21/2009		EXAM	INER
HONEYWELL	INTERNATIONAL I	MUI, CHRISTINE T		
101 COLUMBIA	ROAD		ART UNIT	PAPER NUMBER
P O BOX 2245 MORRISTOWN.	NJ 07962-2245		1797	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 876 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 876 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)	
10/748,398	COLE ET AL.	
Examiner	Art Unit	
CHRISTINE T. MUI	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- 1. This communication is responsive to the amendment filed on 09 October 2008.
- The allowed claim(s) is/are 7,8,10,12,13,15,22,26-37 and 64-84.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  $\square$  All b) ☐ Some\* c) ☐ None of the:
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. 

  Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

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Art Unit: 1797

## DETAILED ACTION

## REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

A particle analyzer with a substrate and a collection surface comprising carbon
nanotubes with a temperature adjusting means such as a heater coupled to the surface
where it is thermally isolated and the surface is suspended over a cavity with legs is not
found, taught nor found obvious in the prior art.

- 3. A particle analyzer for analyzing aerosol particles on a substrate that is thermally isolated as well as couple to a temperature modifying means is not found in the prior art. Furthermore, a particle analyzer for analyzing aerosol particles on a substrate that comprises carbon nanotubes and a particle analyzer with an energy source lens and a detection lens and an analyzer to analyze aerosol particles with a detector that comprises a plurality of pixels that are sensitive to a single or plurality of wavelengths is not found, taught nor found obvious in the prior art
- 4. A particle analyzer comprising of a particle concentrator, a sample collection surface that comprises an adsorbate an energy source providing an energy to induce fluorescence as well a detector for detecting the induced fluorescence, or while being substantially blind to reflective energy from the energy source or where the detector is sensitive to more than one wavelength, is not found, taught nor found obvious over the prior art. The closest prior art to Thomson does not disclose the analyzer collection surface with an adsorbate, but rather a filter paper medium.

Art Unit: 1797

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. MUI whose telephone number is (571)270-3243. The examiner can normally be reached on Monday-Thursday 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 1797

CTM

/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1797